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	<i>DB=PGPB,USPT,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L6	express\$ same plant and (replicon and plus adj strand same RNA? and (viral or virus) same (helper adj virus\$)) and (movement adj protein?)	
<input type="checkbox"/>	L5	express\$ and plant and (replicon same plus adj strand same RNA? and (viral or virus) same (helper adj virus\$))	
<input type="checkbox"/>	L4	express\$ same plant and (replicon same plus adj strand same RNA? and (viral or virus) same (helper adj virus\$))	
<input type="checkbox"/>	L3	express\$ same plant and (replicon same plus adj strand same RNA? same (viral or virus) same (helper adj virus\$))	
<input type="checkbox"/>	L2	express\$ same plant same (replicon same plus adj strand same RNA? same (viral or virus) same (helper adj virus\$))	
<input type="checkbox"/>	L1	turpen-thomas-h.in.	

END OF SEARCH HISTORY

## Refine Search

### Search Results -

Term	Documents
PLANT	451009
PLANTS	223639
REPLICON	5313
REPLICONS	1829
PLUS	405125
PLU	967
STRAND	120692
STRANDS	100585
VIRAL	88516
VIRALS	577
VIRUS	111727
(EXPRESS\$ SAME PLANT AND (REPLICON AND PLUS ADJ STRAND SAME RNA? AND (VIRAL OR VIRUS) SAME (HELPER ADJ VIRUS\$)) AND (MOVEMENT ADJ PROTEIN?)).PGPB,USPT,EPAB,DWPI,TDBD.	0

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L6

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*DB=PGPB,USPT,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=ADJ*

<u>L6</u>	express\$ same plant and (replicon and plus adj strand same RNA? and (viral or virus) same (helper adj virus\$)) and (movement adj protein?)	0	<u>L6</u>
<u>L5</u>	express\$ and plant and (replicon same plus adj strand same RNA? and (viral or virus) same (helper adj virus\$))	0	<u>L5</u>
<u>L4</u>	express\$ same plant and (replicon same plus adj strand same RNA? and (viral or virus) same (helper adj virus\$))	0	<u>L4</u>
<u>L3</u>	express\$ same plant and (replicon same plus adj strand same RNA? same (viral or virus) same (helper adj virus\$))	0	<u>L3</u>
<u>L2</u>	express\$ same plant same (replicon same plus adj strand same RNA? same (viral or virus) same (helper adj virus\$))	0	<u>L2</u>
<u>L1</u>	turpen-thomas-h.in.	52	<u>L1</u>

END OF SEARCH HISTORY

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=> file agriculture bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED  
COST IN U.S. DOLLARS

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SINCE FILE	TOTAL
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=> s express (s) plant and (replicon and plus (w) strand (s) RNA and (viral or virus) (s) (helper (w) virus?) and (movement (w) protein#)  
UNMATCHED LEFT PARENTHESIS 'AND (REPLICON'  
The number of right parentheses in a query must be equal to the number of left parentheses.

=> s express (s) plant and (replicon and plus (w) strand (s) RNA and (viral or virus) and) (helper (w) virus?) and (movement (w) protein#)  
MISSING TERM 'AND) '  
The search profile that was entered contains a logical operator followed immediately by a right parenthesis ')'.  
'

=> s express (s) plant and ((replicon and plus (w) strand) (s) RNA) and (viral or virus) (s) (helper (w) virus?)) and (movement (w) protein#)  
UNMATCHED RIGHT PARENTHESIS 'VIRUS?)) AND'  
The number of right parentheses in a query must be equal to the number of left parentheses.

=> s express (s) plant and ((replicon and plus (w) strand) (s) RNA and (viral or virus) (s) (helper (w) virus?)) and (movement (w) protein#)  
PROXIMITY OPERATION NOT ALLOWED  
Certain operators may not be nested in combination with other operators. A nested operator is valid only when it occurs at the same level or above the operator outside the nested phrase as determined by the following precedence list:

1. Numeric
2. (W), (NOTW), (A), (NOTA)
3. (S), (NOTS)
4. (P), (NOTP)
5. (L), (NOTL)
6. AND, NOT
7. OR

For example, '(MONOCLONAL(W)ANTIBOD?) (L)ANTIGEN?' is valid since (W) is above (L) on the precedence list. However, '((THIN(W)LAYER) (L)PHOSPHOLIPID#) (A)LACTONE#' is not valid since (L) is below (A) on the precedence list. The only exception is the 'OR'

operator. This operator may be used in combination with any other operator. For example, '(ATOMIC OR NUCLEAR) (W) REACTOR' is valid.

=> s express (s) plant and ((replicon? (s) plus (w) strand) and RNA and ((viral or virus) (s) (helper (w) virus?))) and (movement (w) protein#)

L1 0 FILE AGRICOLA  
L2 0 FILE BIOBUSINESS  
L3 0 FILE BIOCOMMERCE  
L4 0 FILE BIOSIS  
L5 0 FILE BIOTECHNO  
L6 0 FILE CABA  
L7 0 FILE CAPLUS  
L8 0 FILE CBNB  
L9 0 FILE CIN  
L10 0 FILE CONFSCI  
L11 0 FILE CROPB  
L12 0 FILE CROPU  
L13 0 FILE DISSABS  
L14 0 FILE ESBIODBASE

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'EXPRESS (S) PLANT'  
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'REPLICON? (S) PLUS'  
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'VIRUS) (S) '

L15 0 FILE FEDRIP  
L16 0 FILE FOMAD  
L17 0 FILE FOREGE  
L18 0 FILE FROSTI  
L19 0 FILE FSTA  
L20 0 FILE GENBANK  
L21 1 FILE IFIPAT  
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L24 0 FILE NAPRALERT  
L25 0 FILE NTIS  
L26 0 FILE PASCAL  
L27 0 FILE PHIC  
L28 0 FILE PHIN  
L29 0 FILE PROMT  
L30 0 FILE SCISEARCH  
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L32 0 FILE USPAT2  
L33 0 FILE ADISCTI  
L34 0 FILE ADISINSIGHT  
L35 0 FILE ADISNEWS  
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L38 0 FILE BIOTECHDS  
L39 0 FILE CANCERLIT  
L40 0 FILE CEABA-VTB  
L41 0 FILE CEN  
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TOTAL FOR ALL FILES

L68 2 EXPRESS (S) PLANT AND ((REPLICON? (S) PLUS (W) STRAND) AND RNA  
 AND ((VIRAL OR VIRUS) (S) (HELPER (W) VIRUS?))) AND (MOVEMENT  
 (W) PROTEIN#)

=> d l68 1-2 ibib abs

L68 ANSWER 1 OF 2 IFIPAT COPYRIGHT 2004 IFI on STN  
 AN 03764727 IFIPAT;IFIUDB;IFICDB  
 TITLE: VIRAL AMPLIFICATION OF RECOMBINANT MESSENGER  
**RNA IN TRANSGENIC PLANTS**  
 INVENTOR(S): Turpen; Thomas H., Vacaville, CA  
 PATENT ASSIGNEE(S): Large Scale Biology Corporation, Vacaville, CA  
 PRIMARY EXAMINER: Fox, David T  
 AGENT: Chiang, Robin C.  
 Gallegos, Thomas  
 Halluin, Albert P.

	NUMBER	PK	DATE
PATENT INFORMATION:	US 6462255	B1	20021008
APPLICATION INFORMATION:	US 1999-414916		19991008
EXPIRATION DATE:	30 Dec 2012		

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
CONTINUATION of:	US 1992-997733	19921230	ABANDONED
CONTINUATION of:	US 1994-336724	19941109	5965794
FAMILY INFORMATION:	US 6462255	20021008	
	US 5965794		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	CHEMICAL		
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 MICROFILM REEL NO: 013064 FRAME NO: 0667  
 NUMBER OF CLAIMS: 31  
 GRAPHICS INFORMATION: 8 Drawing Sheet(s), 10 Figure(s).

AB A novel method of over expressing genes in plants is provided. This method is based on the **RNA** amplification properties of **plus strand RNA viruses** of plants. A chimeric multicistronic gene is constructed containing a plant promoter, **viral** replication origins, a **viral movement protein** gene, and one or more foreign genes under control of **viral** subgenomic promoters. Plants containing one or more of these recombinant **RNA** transcripts are inoculated with **helper virus**. In the presence of **helper virus** recombinant transcripts are replicated producing high levels of foreign gene **RNA**. Sequences are provided for the high level expression of the enzyme chloramphenicol acetyltransferase in tobacco plants by **replicon RNA** amplification with **helper viruses** and **movement protein** genes derived from the tobamovirus group.

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CLMN 31

GI 8 Drawing Sheet(s), 10 Figure(s).

L68 ANSWER 2 OF 2 USPATFULL on STN

ACCESSION NUMBER: 2002:262507 USPATFULL

TITLE: Viral amplification of recombinant messenger  
RNA in transgenic plants

INVENTOR(S): Turpen, Thomas H., Vacaville, CA, United States

PATENT ASSIGNEE(S): Large Scale Biology Corporation, Vacaville, CA, United  
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6462255	B1	20021008
APPLICATION INFO.:	US 1999-414916		19991008 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1994-336724, filed on 9 Nov 1994, now patented, Pat. No. US 5965794 Continuation of Ser. No. US 1992-997733, filed on 30 Dec 1992, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Fox, David T.		
LEGAL REPRESENTATIVE:	Halluin, Albert P., Gallegos, Thomas, Chiang, Robin C.		
NUMBER OF CLAIMS:	31		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10 Drawing Figure(s); 8 Drawing Page(s)		
LINE COUNT:	785		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel method of over expressing genes in plants is provided. This method is based on the **RNA** amplification properties of **plus strand RNA viruses** of plants. A chimeric multicistronic gene is constructed containing a plant promoter, **viral** replication origins, a **viral movement protein** gene, and one or more foreign genes under control of **viral** subgenomic promoters. Plants containing one or more of these recombinant **RNA** transcripts are inoculated with **helper virus**. In the presence of **helper virus** recombinant transcripts are replicated producing high levels of foreign gene **RNA**. Sequences are provided for the high level expression of the enzyme chloramphenicol acetyltransferase in tobacco plants by **replicon RNA** amplification with **helper viruses** and **movement protein** genes derived from the tobamovirus group.

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